

Z/038/60/000/004/002/005
A201/A026

The Project of the Technical and Nuclear Physics Department in Prague-Libeň

for 150 students each. Workshops for practical training of students, for maintenance and production of own laboratory equipment will be attached to a nuclear engineering trade school, to be built in conjunction with this installation. The building will have a subtle, reinforced-concrete frame with a 330 cm modulus and a constant pillar cross section of 25 x 75 cm. The accelerator laboratories will be equipped with a 5 Mev Van de Graaff accelerator and an 800 keV cascade accelerator. The electrostatic accelerator will be located in a room 7 x 11.5 x 21 m, equipped with a 16 ton crane (Fig. 3). Below the accelerator room there will be a target room 11 x 11.5 x 6 m, which will also house the vacuum and other accessory equipment. A 30-m-long experimental tunnel, 3 x 2 m, will lead out of the target room. Adjoining to the accelerator room there will be a control room, a measuring room, laboratories and a workshop, which will also serve the cascade accelerator. The cascade accelerator will be located on the next floor in the opposite end of the wing so as to eliminate interference between the two accelerators. It will have auxiliary rooms similar to those of the electrostatic accelerator. All rooms will be air-heated and equipped with a ventilation system securing a 10 cph exchange of the air. The radiochemical laboratories

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will occupy the first and second floors of the eastern part of the wing (C). The first floor will house "hot" laboratories for work with radiation sources up to 5 c, the second floor will house laboratories for work with sources up to 50 mc. These laboratories will form a separate unit completely isolated from the rest of the building. Work with high-activity materials will be done in a hot cell, 2,400 x 2,400 x 1,500 mm, equipped with periscopes and master-slave manipulators. Work with lower-activity sources will be done in cast-iron boxes equipped with mechanical arms and in glove boxes. - The project has been designed so as to permit a future expansion by annexes (e.g., for technical physics) or by new separate buildings to house, e.g., a high frequency linear accelerator, a reactor, or a laboratory of plasma physics. There are 3 photographs and 3 figures. (Edited by B. Kvasil.)

ASSOCIATIONS: Fakulta technické a jaderné fyziky (Department of Technical and Nuclear Physics), Prague (Drška, L.); Státní ústav Chemoprojekt (Chemoprojekt State Institute), Prague (Hejlek, R.)

Card 5/5

VETERINARY MEDICINE

CZECHOSLOVAKIA

HEJLICEK, K.; Veterinary Faculty, College of Agriculture (VSZ, Veterinarni Fakulta), Brno.

"On the Problems on Tuberculosis in Pigs."

Prague, Veterinarni Medicina, Vol 11, No 8, Aug 66, pp 479 - 484

Abstract [Author's English summary modified]: Type differentiation of mycobacteria from pigs slaughtered at the Brno slaughterhouse was made. In 128 samples taken and out of these 51 isolated strains of mycobacteria were calculated. 82.3% were typed as Myc. avium, 9.8% as Myc. bovis, and 3.9% as a mixed infection of Myc. bovis and avium; 3.9% were a mixed infection by Myc. avium and saprophytic mycobacteria. 32 samples of organs showing tuberculous changes were taken; 14 isolated strains of bacteria were cultivated from these: 71.4% were Myc. bovis, and 28.5% as Myc. avium. 3 Tables, 8 Western, 4 Czech, 9 Eastern references. (Manuscript received 27 Jul 65).

1/1

HEJLICEK, Karel, MVDr.; DRAZAN, Jaroslav, MVDr.; PISKAC, Alois, MVDr.

Contribution to the study of colostral immunity in cattle tuberculosis.
Veter medicina 8 no.5:355-362 O '63.

1. Chair of Epizootiology and Internal Diseases of the Faculty of
Veterinary Medicine of the Higher School of Agriculture, Brno. Head
of the Chair [doc, MVDr.] Jaroslav Drazan.

HEJLICEK, Karel, promovany veterinarni lekar

Diagnosis of poultry tuberculosis by threefold tuberculinization
in comparison with the droplet agglutination. Veterinarni
medicina 7 no.1:53-58 '62.

1. Katedra epizootologie, Veterinarni fakulta Vysoke skoly
zemedelake, Brno.

HEJLICEK, Karel, promovany veterinarni lekar

Examination of the allergy and production of antibodies after
experimental infection of swine with saprophytic mycobacteries.
Veterinarni medicina 7 no.1:59-64, '62.

1. Katedra epizootologie, Veterinarni fakulta Vysoke skoly
zemedelske, Brno.

CZECHOSLOVAKIA

HEJLICEK, Karel, Dr of Veterinary Medicine, DRAZAN, Jaroslav, Dr of Veterinary Medicine, and PISKAC, Alois, Dr of Veterinary Medicine, Chair of Epizootology and Internal Diseases (Katedra epizootologie a vnitřních chorob), Faculty of Veterinary Medicine (Veterinarní fakulta), VSZ [Vysoká škola zemědělská; Higher School of Agriculture], Brno, Docent Jaroslav DRAZAN, Dr of Veterinary Medicine, director.

"A Contribution to the Study of Colostral Immunity Against Bovine Tuberculosis"

Prague, Veterinarní Medicina, Vol 8(XXXVI), No 5, October 1963, pp 355-362.

Abstract [Authors' English summary, modified]: Investigated was the occurrence of antibodies in TB cows and their transfer to calves by means of colostrum. It was found that the level of the hemagglutination antibodies in colostrum corresponded to their level in the blood serum of cows or even was higher. In calves these antibodies were found two and more hours after they drank the colostrum; blood retained them for more than 21 days. The level of specific antibodies is usually determined along with the resorption of gamma globulin and their volume always corresponds to the gamma-globulin content in colostrum. Seven references, including 2 Czech.

1/1

- 5 -

UHLIR, Jaromir; POTRUSIL, Bohumil; HANZL, Josef; HEJLOVA, Zora; PERESTY,
Stanislav; SEDLARIK, Karel; DOLINA, Jiri

Reconstruction of tips of cardiac valves. Rozhl. chir. 41 no.5:306-
312 '62.

1. II chirurgicka klinika lekárske fakulty University J.Ev.Purkyne
v Brne, prednosta prof. MUDr. Jan Navratil.
(HEART VALVES surg)

PISA, Zbynek, HAMMER, Jan; s technickou asistenci: STENDLOVE, A.; HEJLOVE, M.

Evaluation of the treatment of hypotensive conditions after
occlusion of the coronary artery in closed thorax experiments in
dogs. Cas.lek.cesk. 99 no.42:1325-1332 14 0 '60.

1. Ustav pro choroby obehu krevního, Praha-Krc, reditel prof.
MUDr. Kl. Weber.

(MYOCARDIAL INFARCT exper)
(HYPOTENSION exper)

HEJMA, Karel

The Metra fire alarm system. Jemna mech opt 5 no.9:281-282 S '60.

1. Metra Praha, n.p.

HEJMANKOVA-UHROVA, N.; HEJTMANEK, M.

Contribution to the occurrence of actinomycetes, bacteria, and fungi in the sand regions of southern Moravia. n. 417. (SPISY, No. 378, 1956, Brno, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

HEJMANOWSKI, S.

Organization of poplar plantations. p. [2] of cover.

IAS POLSKI. (Ministerstwo Lesnictwa oraz Stowarzyszenie Naukowo-Techniczne Inzynierow i Technikow Lesnictwa i Drzewnictwa) Warszawa, Poland. Vol. 32, no. 7, Apr. 1958.

Monthly List of East European Accession (EEAI) LC, Vol. 9, no. 1, Jan. 1960.
Uncl.

HEJMANOWSKI, S.

Cultivation of poplar plantations. p. [2] of cover.

LAS POLASKI. (Ministerstwo Lesnictwa oraz Stowarzyszenie Naukowo-Techniczne Inzynierow i Technikow Lesnictwa i Drzewnictwa) Warszawa, Poland. Vol. 32, no. 8, Apr. 1958.

Monthly List of East European Accession (EEAI) LC, Vol. 9, no. 1, Jan. 1960.
Uncl.

HEJMANOWSKI, S.

Manuring young poplar plantations. p. 4.

LAS POLASKI. (Ministerstwo Lesnictwa oraz Stowarzyszenie Naukowo-Techniczne Inzynierow i Technikow Lesnictwa i Drzewnictwa) Warszawa, Poland, Vol. 32, no. 13/14, July 1958.

Monthly List of East European Accession (EEAI) LC, Vol. 9, no. 1, Jan. 1960.

Uncl.

HEJ 1110, E.

On the so-called nitrosocyanide of molybdenum. Wik-
tor Jakób, Aleksandra Dąbrowska-Kanas, and Emilia Hejmo
(Univ. Kraków, Poland). *Roczniki Chem.* 33, 801-3 (1959)
(German summary).—The salt described by Heide and Hof-
mann (*Z. anorg. Chem.* 12, 282 (1896)) as $\text{MoO}_3 \cdot 4\text{KCN} \cdot \text{NH}_4\text{OH} \cdot \text{H}_2\text{O}$ was examd., special procedures including potenti-
metric titration and detn. of magnetic properties being used.
A formula is suggested, showing a new kind of binuclear
complex with coordination no. 8. A. Kreglewski

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1-2-2 (1/2)

Card 1/1

ant

HEJMO, Emilia; OGORZALEK, Maria

Magnetic properties of dipyrindine cobalt(II). Rocz chemii 34 no.3/4:
1135-1137 '60. (EEAI 10:3)

1. Zaklad Chemii Nieorganicznej Uniwersytetu Jagielonskiego, Krakow
(Cobalt) (Pyridine)

JAKOB, Wiktor; HELMIG, Emilia; KANAS, Aleksandra

Inorganic oximes. Pt.1. Rocz chemii 37 no. 7/8:703-709 '63.

1. Department of Inorganic Chemistry, Jagiellonian University,
Krakow.

JAKOB, Wiktor; HELMO, Emilia; KANAS, Aleksandra

Studies on inorganic oximes. Rozz chemii 38 no. 1:135-136
1974.

1. Department of Inorganic Chemistry, Jagiellonian University,
Krakow.

P/031/60/005/002/001/004
A222/A026

AUTHOR: Hejmo, Władysław

TITLE: Equalization of Load and Velocities of a Twin-Drive for Blooming Mill

PERIODICAL: Archiwum Automatyki i Telemechaniki, 1960, Vol. 5, No. 2, pp. 127 -
- 172

TEXT: The author performs an extensive theoretical analysis of load and velocity equalization control in twin drives of Leonard blooming mills. He points out the deficiencies of conventional control systems and presents a modified and improved system. Theoretical elucidations were verified on a two-high reversing blooming mill. Technical data of the blooming mill were: rollers 1,150 mm in diameter; generators 3,600 kw, 700 v; motors 3,320 kw, 700 v, 50/120 rpm; $B = 0.0256$ sec; $T_w = 1.2$ sec; $T_s = 0.119$ sec;

$$\theta = \frac{T_w}{B} = 46.7; \xi = \frac{E_{GN}}{I_{NR}} = 11.3; \chi = \frac{\xi}{\theta} = 0.24.$$

The theoretical analysis, which to some extent uses approximated calculus, has an explanatory nature and deals with the distribution of momenta in a twin drive, equalization control of load and velocity, control of the high-load and low-load

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Equalization of Load and Velocities of a Twin-Drive for Blooming Mill

motors, influence of delay on the control system, influence of load variation on the control performance, load equalization control as a function of current difference, influence of the excitation coefficient on control performance, correction of velocity errors in unstable states. A summary of the theoretical analysis shows that: 1) there is no way to simultaneously satisfy the requirements of equal load and equal speed. Moreover, simultaneous performance of both control components decreases the effect that might be achieved by only one component of the control system; 2) in heavy rolling mill drives, the efficiency of equalization control systems depends on the period of time required for the correction signal to make effective the control of generator excitation. Therefore, to ensure a proper load equalization control, the system must be directly introduced into the excitation circuits of generators and must by-pass intermediate electromagnetic inertia elements such as amplidynes, exciters, stabilization transformers etc; 3) the efficiency of motor-speed equalization control is very low and, since this element badly influences load equalization control, motor-speed synchronization is of no use. The conclusions obtained in theoretical analysis were ascertained by experiments with a two-high, dual motor drive blooming mill. A simplified

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Equalization of Load and Velocities of a Twin-Drive for Blooming Mill

circuit diagram of the drive control system subject to tests is shown in Figure 27, i.e., circuits and elements irrelevant of the analysis are omitted. The system shown consists of two independent generator-motor blocks controlled by independent exciteramplidyne stages. The control amplidynes have four excitation coils: UZ, UO, UJ, UN. The further legend of the figure is: A - amplidyne, G - generator, PS - rectifier, R - resistor, S - motor, T - tachogenerator, W - exciter. Test results are shown in Figures 28 through 32. Figure 28 shows the dependency of (excitation coefficient) = $f(t)$, while the amplidyne was controlled by a rectangular signal. Figure 29 shows the functions of motor current at sudden loads, when the current function culminated after about 0.2 sec; the current slope was about 50 ka/sec. Figure 30 shows dynamic components of motor current at the onset of rectangular signals exciting the amplidyne. The tests and a current oscillogram shown in Figure 32 indicate that the load equalization control of the examined system practically does not work. According to Figure 33, the speed equalization system is capable only of reducing the occurring speed variations by a maximum of 30%. The modified control system worked out by the author is shown in Figure 34. The generator excitation coils constitute a single circuit in the

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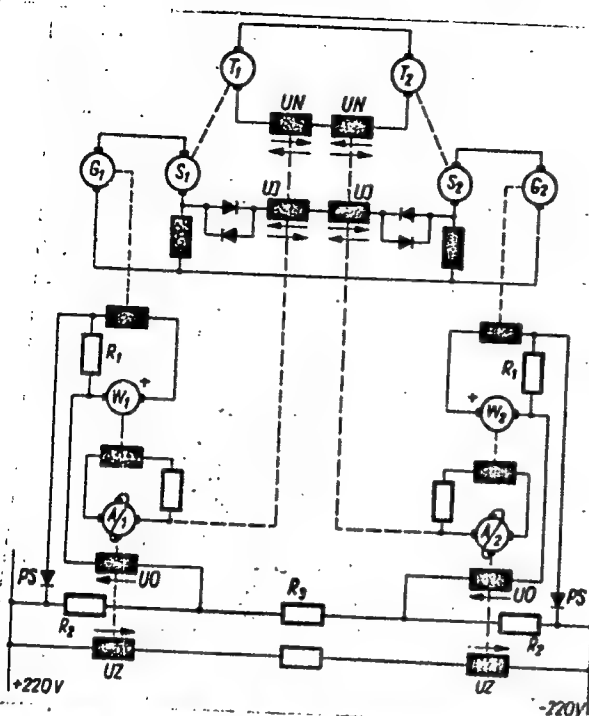
Equalization of Load and Velocities of a Twin-Drive for Blooming Mill

new system as opposed to the foregoing one. Also the coils of the exciters are powered by one common voltage source (amplidyne A_1). The parameters of the amplidyne A_1 circuit were selected so as to ensure that static characteristics of the generators are identical to those in the foregoing circuit. The amplidyne A_2 , which previously operated in the block A_2, W_2, G_2, S_2 , was linked into the generator excitation circuit. According to the conclusions of theoretical analysis, no speed equalization control is provided. Figure 35 shows the magnified oscillogram of amplidyne A_2 voltage, Figures 36a and b show motor-current oscillograms. Comparison with oscillogram in Figure 32 of the foregoing system shows an efficient load equalization control of the new system. There are 37 figures and 5 references: 3 German, 1 Soviet and 1 Polish.

ASSOCIATION: Akademia Górniczo-Hutnicza Katedra Elektrotechniki Hutniczej
(Mining and Metallurgical Academy Department of Metallurgical
Electrical Engineering)

SUBMITTED: July 6, 1959

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Equalization of Load and
Velocities of a Twin-Drive
for Blooming Mill

Figure 27:

Simplified circuit dia-
gram of drive control
system.

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HEJMO, Wladyslaw, dr. inz.; STANEK, Stanislaw, mgr. inz.

A discrete program scheme of automation of the main drive
and the roller-table drive of the blooming-mill. Huta
Lenina prace no.10:116-121 '61.

HEJMO, Wladyslaw, dr inz.

Optimum setting of the passage processes in electric drive systems
of metallurgical plants. Huta Lenina Prace no.12:69-87 '62.

HEJMO, Wladyslaw, dr inz.

Transistor corrector for the optimization of automated electric
drive. Huta Lenina prace no.13:137-143 '63.

HEJMO, Wladyslaw, dr. inż.

Mathematical methods for the determination of the optimizing parameters for correctors in electric drive automation. Huta Lenina prace no.13:106-114 '63.

HEJMO, Wladyslaw

Influence of the nonlinear character of optimizing correctors
on the quality of controlling processes. Archiw automat 9 no.3:
295-308 '64.

1. Department of Electrical Engineering in Metallurgy of the School
of Mining and Metallurgy, Krakow.

BURGER, M.; HEJMOVA, L.

The effect of serum of rabbit immunized with crystalline hexokinase on sugar uptake by the yeast *Saccharomyces cerevisiae* R XII. Folia microbiol 6 no.3:210-211 '61. (EEAI 10:8)

1. Department of Microbiology, Institute of Biology, Czechoslovak Academy of Sciences, Prague.
(SERUM) (SUGAR) (YEAST)

BURGER, M.; HEJMOVA, Libuse; LIEBSTER, J.

Uptake of galactose-1-¹⁴C by Saccharomyces cerevisiae R XII.
Folia microbiol 6 no.2:77-79 '61. (REAI 10:5)

1. Department of Microbiology, Institute of Biology, Czechoslovak
Academy of Sciences. Prague 6.
(GALACTOSE) (YEAST) (CARBON) (RADIOISOTOPES)

BURGER, M.; HEJMOVA, Libuse

Uptake of metabolizable sugars by Saccharomyces cerevisiae.
Folia microbiol 6 no.2:80-85 '61. (KEAI 10:5)

1. Department of Microbiology, Institute of Biology, Czechoslovak
Academy of Sciences, Prague 6.
(SUGARS) (YEAST)

BURGER, M.; HEJMOVA, L.

Uptake of galactose by the yeast during its utilization.
Folia microbiol 6 no.2:136-137 '61. (KEAI 10:5)

1. Department of Microbiology, Institute of Biology, Czechoslovak
Academy of Sciences, Prague 6.
(YEAST) (GALACTOSE)

HEJNA, A.

HEJNA, A. New tin and zinc alloy used as a galvanization coat for protection against corrosion. Tr. from the German. p. 288.

Vol. 1, no. 10, Oct. 1956

NOVA TECHNICA

TECHNOLOGY

Czechoslovakia

So. East European Accessions, Vol. 6, No. 5, May 1957

DYKOVA, H.; PRESL, J., kand. lek. ved.: POSPISIL, J.; KLETECKA, P., Technicka
spoluprace: Hejma, A., Fatinova, B.

Tissue reactions to certain types of suture material in rats. Cesk.
gyn. 24[38] no.9:716-722 Nov. 1959.

1. Ustav pro peci o matku a dite v Praze-Podoli, reditel prof. dr.
J. Trapl.

(UTERUS, surg.) (SUTURES)

JIRSOVA, V.; JIRSA, M.; JANOVSKY, M.; HEJNA, A.

Synthesis of direct bilirubin by liver slices. Cas.lek.cesk. 99
no.7/8:218-221 19 F '60.

1. Ostav pro peci o matku a dite v Praze, prednosta pediatrickeho
useku prim. dr. K. Polacek. Laborator pro patofyziologii krvetvorne
soustavy a jater v Praze, prednosta prof. dr. M. Netousek.
(BILIRUBIN metab.)
(LIVER metab.)

CZECHOSLOVAKIA

HEJNA, A; HEJNY, J.

Hospital for Tuberculosis (Liecebna pre tuberkulozu),
Vysne Hagy (for both)

Prague, Rozhledy v tuberkulose, No 10, 1963, pp 662-686

"The Presence of Myco Bovis in Patients Treated in Vysne
Hagy in 1960-1961. Part II. Clinical and Epidemio-
logical Investigation."

KUTEJ, B., prom. pravnik; HEJNA, D., zdrav. sestra

Problems in rationalization of the work of nurses in hospitals
in conjunction with handling linen. Cesk. zdrav. ll no.7/8:
367-371 '63.

1. Vyzkumny ustav organizace zdravotnictvi, terenni vyzkumna
skupina v Kromerizi.

(HOSPITAL NURSING SERVICE)
(HOSPITAL HOUSEKEEPING)

HEJNA, Karel, Dr.

Case of fetal erythroblastosis conditioned with anti c iso-immunization (anti Hr⁺). Cas.lek.cesk. 91 no.33:964-966 15 Aug 52.

1. Z transfusni stanice v Hradci Kralove.
(ERYTHROBLASTOSIS, FETAL, etiology and pathogenesis,
anti Hr⁺ iso-immun.)

HEJNA, Karel, MUDr.; PLACHY, Vlandimir, MUDr.

~~HEJNA, Karel~~
Isoimmunization with anti E (Rh⁺) in pregnancy; hemolytic disease
of newborn. Cesk. pediat. 12 no.7:637-639 5 July 57.

1. Transfusni stanice VIA J. Ev. P., nac. Dr. Karel Hejna. Detska
klinika VIA J. Ev. P., Nac. Prof. Dr J. Blecha.
(RH FACTORS
anti E isoimmun. in pregn. (Cz))

HEJNA, K.

Utilization of cold temperatures in preservation of the blood and of its derivatives. Cesk. fysiол. 7 no.4:339 July 58.

1. Transfusni stanice klin. nemocnice VIA, Hradec Kralove.

(BLOOD PRESERVED,

by refrigeration (Cz))

(BLOOD DERIVATIVES,

preserv. by refrigeration (Cz))

(REFRIGERATION,

of blood & blood deriv. (Cz))

CHROBÁK, Ladislav; HEJNA, Karel; HEDŽOVÁ, Z.

Conservation of platelets in heparin for use in extracorporeal circulation. Sborn. ved. prac. lek. fak. Karlov. Univ. 8 no. 4: 477-484, '65.

I. I. Interna klinika (prednostar: prof. MUDr. F. Černík) a
Fakultní transfuzní stanice (prednostar: prim. MUDr. K. Hejna),
Karlovy University v Hradci Králové.

HEJNA, L.

Production of coke in the 3rd Five-Year Plan. p. 85

PALIVA. (Ministerstvo paliv a Ceskoslovenska vedecka technicka spolecnost
pro vyuziti pri Ceskoslovenske akademii ved) Praha, Czechoslovakia.
Vol. 39, no. 3, Mar. 1959

Monthly List of East European Accessions (EEAI), LV, Vol. 8, no. 7, July 1959
Uncl.

HEJNA, S.; SLOKAN, K.

Manual for constructing mine premises. II. p. 1494.
(Tehnika, Vol. 11, no. 10, 1956. Beograd, Yugoslavia)

SO: Monthly List of East European Accessions. (EEAL) LC. Vol. 6, No. 7.
July 1957. Uncl.

SEDLACEK, B.; HEJNA, S.

Advantage in using swiveling jigs on radial drilling machines. Stroj
vyr 9 no.6:277-287 '61.

1. Kovosvit, n.p., Sezimovo Usti.

HEJNA, Stanislav

Drilling on radial drilling machines. Stroj vyr 12 no.6:412-417 Je '64.

1. Kovosvit National Enterprise, Sezimovo Usti.

HEJNAL, J.; HRDLICKA, Z.; CERVINKA, F.

Problem of postoperative pseudomembranous enterocolitis. Cesk. gastroenter.
11 no.5:355-360 5 Sept 57.

1. Ustav klinické a experimentální chirurgie, Praha-Krc, reditel doc.
Dr. B. Spacek. J. H., Praha-Krc, Budejovicka 800.

(COLITIS

postop. pseudomembranous enterocolitis (Cz))

(SURGERY, OPERATIVE, compl.

same)

USSR/ General Problems of Pathology. Comparative Oncology. Tumors U-7
in Humans

Abs Jour : Ref Zhur - Biol., No 13, 1958, No 61234

Author : Belan A., Hejnal J., Adler F., Masek R.

Inst : =

Title : Primary Cancer of the Lower Horizontal Part of the Duodenum

Orig Pub : Rozhl. chirurg., 1957, No 12, 830-835

Abstract : Description of a case of an adenocarcinoma of the lower horizontal part of the duodenum, in a patient 68 years of age. Resection was made of the duodenum and the greater part of the affected pancreas. After the operation, the patient felt well for 9 months, and died from bronchopneumonia. Postmortem did not reveal any metastasis of the adenocarcinoma. The clinical picture and differentiated diagnosis were discussed. The difficulty of a diagnosis of the above mentioned condition is emphasized.

Card : 1/1

HEJNAL, J.

Case of aneurysm of the hepatic artery. Rozhl. chir. 36 no.6:420-423
June 57.

1. Ustav klinické a experimentální chirurgie Praha-Krc.
(ARTERIES, HEPATIC, aneurysm
postop., case report (Cz))

18-04-02
BEIAN, A.; HEJNAL, J.; ADLER, F.; MASEK, R.

Primary carcinoma of the 3d part of the duodenum diagnosed by x-ray.
Rozhl. chir. 36 no.12:830-835 Dec 57.

1. UKECH a OUNZ, Vysocany. A. B. Ustav exp. a klin. chir., Praha-Kro.
(DUODENUM, neoplasms
primary polypoid adenocarcinoma of horizontal portion,
x-ray diag. (Gz))

HEJNAL, J.; HRDLICKA, Z.; SCHINDLER, J.; CERVINKA, F., Technická spolupráce:

Z. Divis, J. Hnatek, M. Hubková, Z. Linková, L. Bablová, H. Tazilová,
H. Vidmarová, A. Zedníková.

Antibiotics in preoperative preparation of the large intestine.
Rozhl. chir. 38 no.8:507-515 Aug 59.

1. Ústav klinické a experimentální chirurgie v Praze Ústav mikrobiol.
a epidemiol. **MU** v Praze.

(ANTIBIOTICS, ther.) (COLON, surg.)

HRDLICKA, Z.; HEJNAL, J.

Prevention and treatment of disorders of water and electrolyte metabolism in surgical patients with special regard to diseases of the intestinal tract. Rev.Czech.M. 6 no.4: 241-52 '60.

1. Institute for Clinical and Experimental Surgery, Prague -
Krc. Director: Prof. B. Spacek, M.D.
(WATER ELECTROLYTE BALANCE)
(GASTROINTESTINAL SYSTEM surg)

HRDLICKA, Z.; HEJNAL, J.

Possibility of prevention of ischemic necrosis of the liver by means of antibiotics. Cas. lek. cesk. 99 no.6:167-171 5 F '60.

1. Ustav klinické a experimentální chirurgie, Praha, reditel prof. dr. B. Spacek.

(LIVER DISEASES prev. & control)

(ANTIBIOTICS pharmacol.)

(HEPATIC ARTERY physiol.)

HRDLICKA, Z.; HEJMAL, J.

Prevention and therapy of the most frequent water-electrolyte exchange disorders in surgical patients. Rozhl.chir.40 no.2-3: 100-108 Mr '61.

1. Ustav klinicke a experimentalni chirurgie, Praha-Krc, reditel prof.dr. B.Spacek.

(SURGERY OPERATIVE compl)
(WATER ELECTROLYTE BALANCE)

HEJNAL, J

SURNAME (in caps); Given Names

Country: Czechoslovakia

Academic Degrees:

Affiliation: Instituto of Clinical and Experimental Surgery (Ustav
"klinicke a experimentalni chirurgie), Prague; Director
(Reditel): Prof Dr B Spacok

Source: Prague, Prakticky Lekar, Vol 41, No 17, 5 September 1961,
pp 743-751

Data: "The Present-Day Possibilities of Reconstructive
Surgery of the Arteries."

Authors:

HEJHAL, L, MUDr

HEJNAL, J, MUDr

FIRT, P, MUDr

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HEJHAL, L.; FIRT, P.; MICHAL, V.; HEJNAL, J.---

On some problems in contemporary arterial surgery. Rozhl. chir. 42
no.1:3-7 Ja '63.

1. Ustav klinické a experimentální chirurgie v Praze, reditel prof.
dr. B. Spacek, DrSc.
(ARTERIES) (VASCULAR SURGERY)

MICHAL, V.; HEJHAL, J.; HEJHAL, L.; FIRT, P.

Surgery of the arteries of the extremities. Rozl. chir. 42 no. 1:
8-13 Ja '63.

1. Ustav klinické a experimentální chirurgie v Praze, reditel prof.
dr. B. Spacek, DrSc.
(VASCULAR SURGERY) (ARTERIOSCLEROSIS) (EXTREMITIES)
(INTERMITTENT CLAUDICATION)

FIRT, P.; MICHAL, V.; HEJNAL, J.; HEJHAL, L.

Contribution to the surgery of aortic iliac occlusions. Rozhl. chir.
42 no.1:17-27 Ja '63.

1. Ustav klinické a experimentální chirurgie v Praze, reditel prof.
dr. B. Spacek, DrSc.

(AORTA)	(ILIAC ARTERY)	(VASCULAR DISEASES)
(VASCULAR SURGERY)	(BLOOD VESSEL TRANSPLANTATION)	

HEJNAL, J.; HEJHAL, L.; FIRT, P.; MICHAL, V.

Diagnosis and surgical treatment of vasorenal hypertension. Rozhl. chir.
42 no.1:44-54 Ja '63.

1. Ustav klinické a experimentální chirurgie v Praze, reditel prof.
dr B. Spacek, DrSc.

(HYPERTENSION RENAL) (ANGIOGRAPHY) (RENAL ARTERY OBSTRUCTION)
(SPLENIC ARTERY)

~~GEYNAL~~ Ya. [Hojnal, J.]; GEYGAL, L. [Rejgal, L.]; FIRT, P.; MIKHAI, V.
[Michal, V.]

Surgical treatment of vasorenal hypertension. Khirurgiia 40
no.7:68-75 JI '64. (MIRA 18:2)

1. Institut klinicheskoy i eksperimental'noy khirurgii (dir. -
chlen-korrespondent Chekhoslovatskoy akademii nauk prof. B.
Shpachek [Spacek, B.]), Praga.

FIRT, P.; MIKHAL, V. [Michal, V.]; GRYMAL, E. [Hrymal, E.]; JELINEK, J.
[Hejgal, L.]

Reconstructive surgery in obliterating arteriosclerosis of the
abdominal aorta and iliac arteries. Khirurgiya 40 no.7:85-83
Jl '64. (IHLA 18:2)

1. Institut klinicheskoy i eksperimental'noy khirurgii (dir. -
chlen-korrespondent Chekhoslovatskoy akademii nauk prof. B.
Shpachek [Spacek, B.]), Praga.

HEJHAL, L.; HEJHAL, J.; FIRT, P.; MICHAL, V.

Preventive administration of penicillin in surgical reconstruction of arteries. Rozhl. chir. 44 no.5:301-305 My'65.

1. Ustav klinické a experimentální chirurgie v Praze (reditel: prof. dr. B. Spacek, DrSc.).

HEJNAR, Tadeusz, mgr inż.

Edmund Janicki; obituary. Przegl odlew 15 no.3:89 Mr '65.

HECNAK, Tadeusz

Certain strength properties of 15L type steel. Przegl odlew 14 no.11:
311-318 N '64,

HEJMAR, T

Distr: 4E2c

Mechanical properties of cast steel from a side-blown converter. T. Hejmar and E. Janicki. *Przegląd Ociepleniowy* 8, 295-301 (1968).—The characteristics of tensile properties of a normalized cast steel obtained from a side-blown converter were examd. The cast iron for the converter charge was prepd. in a cupola with acid or basic lining. The converter capacity was 1200 kg., the pressure of the blast 0.2-0.3 atm., the av. supply of air 50 cu.m./min., and blowing time 10-15 min. The compn. of cast steel, when a cupola with acid or basic lining was used, was C 0.16-0.18, Si 0.21-0.54, Mn 0.35-0.67, P 0.05-0.10, and S 0.11-0.3, Si 0.23-0.33, Mn 0.65-0.87, P 0.08-0.09, S 0.071-0.082%, resp. To compare the properties of these cast steels, a standard melt from open-hearth furnace was prepd. contg. C 0.19, Si 0.25, Mn 0.70, P 0.033, and S 0.026%. The tensile properties of converter cast steels at room temp. met the requirements for standard product, the properties being better for melts contg. lesser amt. of S. The impact strength of converter cast steel made of charge prepd. in basic lined cupola was higher than the min. required, 5 kg./sq. cm., while for converter cast steel made of charge prepd. in an acid lined cupola, over 50% of results were below the required min. for standard product. From statistical interpretation of the results, close relations between S content and tensile strength, elongation, or impact strength were established, these properties being lower with increase in S content. The tensile properties detd. at low temps. confirmed the better quality of converter cast steel made of a charge prepd. in a basic lined cupola. No evidence of occurrence of critical temp. was found in the range of temps. covered by testing. The curves representing the tensile test results in the range 0-800° showed a typical character with max. of tensile strength at about 300° and min. plastic properties near that temp. W. Tomaszczak

Distr: 4E20

6048

889.141.25.019.2:600.184

Holnar T., Janicki E. The Mechanical Properties of Cast Steel Produced in a Side Blown Converter.

„Właściwości mechaniczne staliwa otrzymanego z konwertora z bocznym dmuchem”. Przegląd Odlewnictwa. No. 10—11, 1960, pp. 301—307, 4 figs.

Investigations conducted on grade 15L converter steel, in a normalized state, obtained from charges from an acid and basic cupola. An investigation of mechanical properties of such steel at room temperature and at temperatures higher and lower than room temperature. The sulphur content of the steel was 0.07 to 0.16 per cent and the average phosphorus content — 0.08 per cent. The relationship was observed between the mechanical properties at room temperature and the content of sulphur. Up to 0.16 per cent of sulphur content, the indices obtained from tests of the tensile strength, yield strength, elongation

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Hejnar T., Janicki E. The Mechanical Properties of Cast Steel...

and contraction of area, show values above the minimum laid down by Polish Standard PN/H-54/83151; the impact strength U has higher values than the minimum laid down by Polish Standards, with sulphur content lower than 0.11 per cent. At temperatures up to -50°C , the strength and plastic properties of cast steel are within the limits de-

termined by the Polish Standard for room temperature, with sulphur content up to 0.08 per cent. At temperatures higher than room temperature, the tensile strength and yield point were higher than the requirements of the standard referred to, with sulphur content up to 0.16 per cent; the elongation and contraction of area were higher than the requirements of the same standard, with sulphur content up to 0.08 per cent.

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Desulfurization of cast iron in basic ladle. T. Hejnar
and S. Pietrzkiewicz. *Przegląd Odlewnictwa* 9, 100-101
(1959).—The methods of desulfurization of cast iron in the
ladle were briefly discussed, and the results of desulfuriza-
tion under the plant conditions by applying a basic ladle
were described. The lining of the ladle was rammed with
a bulk consisting of burnt dolomite and pitch (10%), and
intensely heated for 24 hrs. Desulfurization of cast iron
was carried out by 1.5% Na carbonate. As a result, the
content of S was reduced by 60-70, Si 31, P 12, and Mg
11%. The contents of C increased by 3%. As disadvan-
tages of the method the following factors were quoted: low
degree of desulfurization in the 1st portions of cast iron,
decrease in Si content, and the necessity of careful heating
of lining before use. W. Tomaszewski

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HEJNO, K.

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CZECH

Synthetic uterotonics. I. Substituted 1-benzylpiperidines. Karel Hejno and Zdeněk Arnošt (Farm. biochem. fakulty, Příbram, Czech.). *Chem. Listy* 47, 801-12 (1953). A series of hydroxylated and alkoxylated 1-benzylpiperidines (I) with an aldehyde over Raney Ni, by the condensation of I with substituted PhCH_2Cl , by the reduction of BzNC_6H_5 with LiAlH_4 , or by the Maumich condensation of I with an aldehyde and a phenol: 12,5-(MeO) $_2$ C $_6$ H $_3$ CH $_2$ NC $_6$ H $_5$ and 2,5-HO(MeO) $_2$ C $_6$ H $_3$ CH $_2$ NC $_6$ H $_5$, especially, were strong uterotonics. I HCl, m. 177.2-82.3°, was prep'd. with HCl gas in dioxane. o-MeOC $_6$ H $_4$ CHO (40.8 g.) and 48 ml. I in 100 ml. EtOH gave, by hydrogenation over 9 g. Raney Ni at 130° and 130 atm. initial pressure, 35.9 g. (68.2%) o-MeOC $_6$ H $_4$ CH $_2$ NC $_6$ H $_5$, b $_p$ 108-109°, HCl salt, m. 176-7° (from dioxane); picrate, m. 116.5-13° (from H $_2$ O). m-MeOC $_6$ H $_4$ CHO similarly yielded 28 g. (45.4%) m-MeOC $_6$ H $_4$ CH $_2$ NC $_6$ H $_5$, b $_p$ 108-9°, HCl salt, m. 161.5-2.5°, picrate, m. 132-4°. From p-MeOC $_6$ H $_4$ CHO was prep'd, in the same way, 33.5 g. (54.3%) p-MeOC $_6$ H $_4$ CH $_2$ NC $_6$ H $_5$, b $_p$ 111-12°, HCl salt, m. 184°, picrate, m. 162.5-3°. o-Isocugenol (100 g.) methylated with 126 g. Me $_2$ SO in 60 g. NaOH and 300 ml. H $_2$ O gave 103.5 g. (95.2%) 2,3-(MeO) $_2$ C $_6$ H $_3$ CH $_2$ CHMe, b $_p$ 119-20°, which yielded, by oxidation 67.2% 2,3-(MeO) $_2$ C $_6$ H $_3$ CHO (II), b $_p$ 126-6°, m. 82-4°. II (33.3 g.) and 34.1 g. I dild. with EtOH to 200 ml., hydrogenated with 7 g. Ni at 130° and 116 atm. initial pres-

sure, yielded 23.2 g. (47.2%) 2,3-(MeO) $_2$ C $_6$ H $_3$ CH $_2$ NC $_6$ H $_5$, b $_p$ 120-1°, HCl salt, m. 141-3°, picrate, m. 150-1.5° (from aq. EtOH). 2,3-HO(MeO) $_2$ C $_6$ H $_3$ CH $_2$ NC $_6$ H $_5$, m. 98-100°, gave in EtOH the HCl salt, m. 184-7°. 2,4-(MeO) $_2$ C $_6$ H $_3$ CHO, m. 68-70° (from CCl $_4$) [prep'd. in 67.9% yield from 2,4-(HO) $_2$ C $_6$ H $_3$ CHO, (40.8 g.) 40 ml. I, 120 ml. EtOH, and 9 g. Ni, hydrogenated at 130° and 125 atm., yielded 32 g. (85.3%) 2,4-(MeO) $_2$ C $_6$ H $_3$ CH $_2$ NC $_6$ H $_5$, b $_p$ 136°, HCl salt, m. 175-7°, picrate, m. 130-1° (from dill. EtOH). p-C $_6$ H $_4$ (OMe) $_2$ (18.8 g.) in 30 ml. C $_6$ H $_6$, mixed with 50 ml. conc'd. HCl, the mixt. sat'd. with HCl, allowed to stand 1.5 hrs., the aq. layer removed, the C $_6$ H $_6$ layer washed 3 times with H $_2$ O, dried with CaCl $_2$, filtered, and the filtrate refluxed 4 hrs. with 20 ml. I yielded 11.3 g. (48%) 2,5-(MeO) $_2$ C $_6$ H $_3$ CH $_2$ NC $_6$ H $_5$, b $_p$ 137°, HCl salt, prep'd. in MeOH with HCl in MeOH, m. 128-30° (from MeOH-Me $_2$ CO), m. 167-11° (after drying in vacuo at 100°); picrate, m. 117.5-19.5°. p-MeOC $_6$ H $_4$ OH (24.85 g.) in 90 ml. EtOH mixed with 17 ml. I in 50 ml. H $_2$ O, and the mixt. treated with 15.5 g. 38.7% CH $_3$ O at 15° during 30 min. gave, after standing 2 days, 22 g. (50%) 2,5-HO(MeO) $_2$ C $_6$ H $_3$ CH $_2$ NC $_6$ H $_5$, b $_p$ 124-8°, HCl salt, prep'd. in EtOH, m. 183-3.5° (from EtOH); picrate, m. 143.5-4.5° (from H $_2$ O and EtOH). 2,4-(MeO) $_2$ C $_6$ H $_3$ CHO (16.5 g.) in 100 ml. EtOH hydrogenated over 200 mg. PtO $_2$ with a trace of FeSO $_4$ gave 2,5-(MeO) $_2$ C $_6$ H $_3$ CH $_2$ OH, m. 55.5-6°, which,

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KAREL HEJNO

treated with SOCl_2 in C_6H_6 with cooling yielded, after evapn. in *vacuo* below 40° , unstable $2,6\text{-(MeO)}_2\text{C}_6\text{H}_3\text{CH}_2\text{Cl}$. This compd. (18.6 g.) refluxed with 20 ml. I in 100 ml. C_6H_6 2 hrs. gave 10 g. (43.5%) $2,6\text{-(MeO)}_2\text{C}_6\text{H}_3\text{CH}_2\text{NC}_6\text{H}_5$, b.p. 127.5° , m. $58-7^\circ$ (from petr. ether); HCl salt, m. $161-2^\circ$ (after drying); *picrate*, m. $171.5-2^\circ$ (from aq. EtOH). Hydrogenation of 16.6 g. $3,4\text{-(MeO)}_2\text{C}_6\text{H}_3\text{CHO}$ (I) in 100 ml. EtOH with 100 mg. PtO_2 and a trace of FeSO_4 at 1894 mm. and 18° yielded 15.55 g. (92.5%) $3,4\text{-(MeO)}_2\text{C}_6\text{H}_3\text{CH}_2\text{OH}$ which was transformed, by way of the chloride, to 17.35 g. (73.8%) $3,4\text{-(MeO)}_2\text{C}_6\text{H}_3\text{CH}_2\text{NC}_6\text{H}_5$, t. $131-1.5^\circ$; HCl salt, m. $162-4^\circ$ (from dioxane); HCl salt *monohydrate*, m. $99-101^\circ$ (from moist Me_2CO); *picrate*, m. $183-4^\circ$ (from aq. EtOH). Satg. the mixt. of 69 g. III, 100 ml. C_6H_6 , 27.5 g. (AcH), and 50 ml. concd. HCl at $0-5^\circ$ with HCl , keeping the temp. 30 min. at $2-4^\circ$ and 1 hr. at 20° , draining the aq. layer, and refluxing the org. layer with 100 ml. I 1.5 hrs. yielded 24.0 g. (20%) $4,1,2\text{-MeCH}_2\text{-(NC}_6\text{H}_5)_2\text{C}_6\text{H}_2\text{(OMe)}$, b.p. $111.5-13^\circ$; HCl salt, m. $211.5-12.5^\circ$; *picrate*, m. $181.5-2^\circ$. Piperonal (50.4 g.) in 130 ml. EtOH, 31.25 g. I, and 7.5 g. Ni , hydrogenated at 70° and 112 atm. initial pressure, gave 43.8 g. (56.5%) $3,4\text{-(CH}_3\text{O)}_2\text{C}_6\text{H}_3\text{CH}_2\text{NC}_6\text{H}_5$, b.p. $127-8.5^\circ$; HCl salt, m. $235-0.6^\circ$; *picrate*, m. $185-6.6^\circ$. Benzodioxan (123 g.) in 300 ml. C_6H_6 mixed with 280 ml. concd. HCl , the mixt. satd. with ice cooling with HCl gas, treated with 81 ml. 33.5% CH_3O satd. again with HCl , and the org. layer heated with 162 g. I 8 hrs. on the steam-bath gave 104.4 g. (58.8%) $3,4\text{-(CH}_3\text{O)}_2\text{C}_6\text{H}_3\text{CH}_2\text{NC}_6\text{H}_5$ (IV), b.p. $176-8^\circ$; HCl salt, m. $234-5.5^\circ$; *picrate*, m. $170.5-3^\circ$. Oxidation of IV with KMnO_4 gave $3,4\text{-(CH}_3\text{O)}_2\text{C}_6\text{H}_3\text{CO}_2\text{H}$, m. $130.5-7.5^\circ$. Vanillin (30.4 g.) and 18.7 g. I in 150 ml. EtOH, hydrogenated with 7 g. Ni at 75° and 120 atm. initial pressure,

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 $87-9^\circ$ (from EtOH or Pr_2O); HCl salt, m. $184.5-5.5^\circ$; *picrate*, m. $152.5-3.8^\circ$. $3,5\text{-(MeO)}_2\text{C}_6\text{H}_3\text{CO}_2\text{H}$, m. $182-4^\circ$ (prepd. in 60% yield by methylation of α -resorcylic acid) (47.1 g.) was transformed with SOCl_2 in C_6H_6 to its chloride which, with 51.1 g. I in 200 ml. C_6H_6 , gave 39.9 g. (82%) $3,5\text{-(MeO)}_2\text{C}_6\text{H}_3\text{CONC}_6\text{H}_5$ (V), m. $62.5-4^\circ$ (from CCl_4). Dropping 24.9 g. V in 250 ml. EtOH into 250 ml. EtOH contg. 4 g. LiAlH_4 , and refluxing this mixt. 31 hrs. gave 21.85 g. (92.1%) $3,5\text{-(MeO)}_2\text{C}_6\text{H}_3\text{CH}_2\text{NC}_6\text{H}_5$, b.p. $134-8^\circ$; HCl salt, m. $185.5-7^\circ$ (from dioxane- MeOH); *picrate*, m. $134-5.5^\circ$. Treating 16.8 g. $1,2,4\text{-C}_6\text{H}_3\text{(OMe)}$, mixed with 3.3 g. (AcH), 25 ml. CHCl_3 , and 15 g. CaCl_2 , with 12.9 ml. 36% HCl at $10-12^\circ$ during 30 min., and refluxing the org. layer, after evapn. the solvent in *vacuo*, 2 hrs. with 20 ml. I and 40 ml. C_6H_6 , yielded 9.1 g. $2,3,4\text{-(MeO)}_3\text{C}_6\text{H}_2\text{CH}_2\text{NC}_6\text{H}_5$, b.p. $140-3^\circ$, t.p. 133° ; HCl salt, $157-61^\circ$ (from dioxane and then from Me_2CO); *picrate*, m. $107-8^\circ$. Similar reaction of 67.3 g. $1,2,4\text{-C}_6\text{H}_3\text{(OMe)}$, 13.2 g. (AcH), 35 ml. HCl and 200 ml. C_6H_6 satd. with ice cooling with HCl , and 87 ml. I gave 58.2 g. (50.1%) $2,4,5\text{-(MeO)}_3\text{C}_6\text{H}_2\text{CH}_2\text{NC}_6\text{H}_5$, b.p. $135-136^\circ$; *picrate*, m. $159-60^\circ$. Syringyl alc. (44.4 g.) in 500 ml. MeOH treated with CH_3N_3 in EtOH gave a quant. yield of $3,4,5\text{-(MeO)}_3\text{C}_6\text{H}_2\text{CH}_2\text{OH}$ which was transformed to the chloride. This dissolved in 500 ml. C_6H_6 , refluxed 2 hrs. with 45 g. I, yielded 46.2 g. $3,4,5\text{-(MeO)}_3\text{C}_6\text{H}_2\text{CH}_2\text{NC}_6\text{H}_5$, m. $43-4^\circ$, b.p. $157-60^\circ$ (72.5% based on the syringyl alc.); HCl salt, m. $192-4^\circ$; *picrate*, m. $157-8.5^\circ$. Trimethylgallic acid (172 g.) was transformed to 74.0 g. (50.7%) $2,6\text{-(MeO)}_2\text{C}_6\text{H}_3\text{OH}$ (VI), m. $54-5^\circ$, b.p. $138-40^\circ$ according to Ger. patent 182868, in the presence of 10 g. $\text{Na}_2\text{S}_2\text{O}_8$. Treating 67.8 g. VI in 200 ml. EtOH with 37.5 g. I and 33.3 ml. CH_3O (contg. 0.397 g. CH_3O in 1 ml. soln.) gave, after 10 days at room temp., 95.1 g. (80.3%) $1,3,5\text{-HO(MeO)}_3\text{C}_6\text{H}_2\text{CH}_2\text{NC}_6\text{H}_5$, m. $134-8^\circ$; HCl salt, m. $129-33^\circ$ (from $\text{MeOH-Me}_2\text{CO}$); *picrate*, m. $182-4^\circ$ (from AcOEt).
 M. Hudlický

HEJNO, KAREL

Chem Pseudofenone Zdeněk Arnold and Karel Hejno. Czech. 85,207, Dec. 1, 1955. The older method (cf. Org. Syntheses 23, 78) of prepn. was improved by carrying out the condensation of citral (I) with Me₂CO in the presence of dry PhONa (II) in C₆H₆, thus raising the yields to 74-81%. II (4.7 g.) in a boiling 250 ml. dry C₆H₆ and 125 ml. dry Me₂CO treated dropwise during 90 min. with 30.4 g. I in 50 ml. dry C₆H₆, boiling continued, the mixt. cooled 30 min., the II, sepd., and the product distd., yields 28.4-31.7 g. pseudofenone, used in the synthesis of vitamin A. L. F. Urbánek

Hejno, Karel

✓ Dichloroacetyl chloride. Zdeněk Arbibš and Karel
Hejno, Czech. 85,208, Dec. 1, 1955. Oxidation of CH_3COCl .
 CHCl_2 (I) is considerably accelerated by addn. of 3% org.
 peroxides, thus lowering the losses caused by escaping gases.
 Into a boiling mixt. of 1 kg. I and 5 g. H_2O_2 is passed O
 13-24 hrs., the mixt. then added with stirring and cooling
 to 20 g. Cl_2CHCOCl (II) and 2 ml. pyridine, the temp. kept
 1 hr. at 60-70°, and the product distd., gave 670 g. II, used
 in the synthesis of chloramphenicol. — L. J. Ullrich

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 H. J. Ullrich

HEJNO, KAREL

Synthetic uterotonics. II. Tertiary amines derived from 3,4-dimethoxybenzylamine. Zdenek Arndt and Karel Hejno (Výzkumný ústav farm. biochem., Prague). *Chem. Listy* 49, 111-14; *Collection Czech. Chem. Commun.* 20, 587-70 (1955) (in German); cf. C.A. 49, 322c. — A series of deriva. of 3,4-(MeO)₂C₆H₃NH₂ were prep'd. and tested for their uterotonic action. 3,4-(MeO)₂C₆H₃CH₂OH (14.8 g.) in 100 ml. C₆H₆ was treated with 14.3 g. SOCl₂ in 80 ml. C₆H₆ below 88°, the mixt. stirred 1 hr. at room temp., the C₆H₆ and SOCl₂ were evap'd. in vacuo below 40°, the residue was dissolved in C₆H₆, the soln. evap'd. in vacuo, the residue dissolved in 160 ml. C₆H₆, the soln. filtered, the filtrate refluxed 6 hrs. with 0.21 mole secondary amine, the cooled mixt. treated with 200 ml. 2N H₂SO₄, ext'd. with Et₂O, and the amine liberated with NH₃, ext'd. with CHCl₃ or C₆H₆, and dist'd. in vacuo to give tertiary amines in 48-70% yields.

The following 3,4-(MeO)₂C₆H₃CH₂NH₂ were prep'd. (N₂, b.p./mm., and m.p. of the HCl salt and of the picrate given): N₂, 68°/0.7, 303-3° (from EtOH), 168-7°; N₂, 68°/0.2, 183-4° (from dioxane), 128-0°; N₂, 64°/0.1, 146-6° (from Me₂CO-Et₂O), 110°; N₂, 110°/0.1, 181-3° (from C₆H₆), 85-6°; N₂, 110°/0.3, 185-6°; pyrrolidine, 107-0°/0.22, 163-3° (from dioxane-MeOH), 133-40°; 1-methylpiperidine (I), 110-21°/0.1, 168-70° (from dioxane), 108-7.8°; 1,2-dimethylpiperidine, 128-35°/0.02 (bath temp.), yield 14.5%; 1,3-dimethylpiperidine, 176.5-7.2°; hexamethylenamine, 114.8-18°/0.1, 168-0° (from dioxane), 171.3-3°. Also prep'd.: 1-(3,4-dimethoxyphenyl)piperidine, b.p. 128-7.5°, HCl salt, m. 140-43° (from dioxane); picrate, m. 183-3°; 1-(3-indolylmethyl)-2-methylpiperidine (II) HCl salt, m. 188-7° (from dioxane-MeOH). The relative uterotonic effects of I and II are 103 and 168 as compared with that of 1-(3,4-dimethoxybenzyl)piperidine taken as 100.

M. Hudlická

HEJNO, KAREL

Chem
Isolating γ -picolinic acid. Zdeněk Arnold and Karel Hejno, Czech. 80,283, July 10, 1962. 19 picolonic (I) containing 20 contg. 87% γ -I 1000 is added (CO₂H), 211.0 g (77%) and C₆H₆ 1000 by vol., the mixt. heated with stirring ending azeotropic removal of H₂O, C₆H₆ 750 distd. and EtOH 200 parts added, and the mixt. left to crystallize yielding after 48 hrs. 67.0-71.8% oxalate of γ -I, which is washed with C₆H₆ and EtOH. Oxalate 100 is decompd. by azeotropic distn. with NaOH 90 in H₂O 700 parts to give γ -I in quant. yield and 94-95% purity. Oxalate, m. 139-40.5°, that was previously recrystd. from EtOH yields spectroscopically pure γ -I. L. J. Uchida

JAROLIM, V.; HEJNO, K.; SORM, F.

Composition of brown coal. Pt.9. Coll Cz Chem 30 no.3:873-879 Mr '65.

1. Institut fur organische Chemie und Biochemie, Tschechoslowakische Akademie der Wissenschaften, Prague. Submitted June 15, 1964.
2. Advisory Board Chariman, "Collection of Czechoslovak Chemical Communications" (for Sorm).

JAROLIM, V.; STREIBL, M.; HEJNO, K.; SORM, F.

Composition of lignite. I. Some substances present in montan wax.

II. Additional substances present in montan wax. Coll Cz chem 26
no.2:459-465 F '61. (EEAI 10:9)

1. Institut fur organische Chemie und Biochemie, Tschechoslowakische
Akademie der Wissenschaften, Prag.

(Lignite) · (Montan wax)

1/6 Jan, K.

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CZECHOSLOVAKIA

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Prague, Collection of Czechoslovak Chemical Communications,
No 9, 1963, pp 2318-2326

"On the Composition of Brown Coal VII. On Further Materials
Contained in the Harz Section of Mineral Wax."

f/LEJNO, N.

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Prague, Collection of Czechoslovak Chemical Communications,
No 9, 1963, pp 2443-2453

"On the Composition of Brown Coal. VIII. Structure of
Some Triterpenic Combinations Isolated from Mineral Wax."

USSR / Plant Physiology. Growth and Development.

I

Abs Jour : Ref Zhur - Biol., No 9, 1958, No 38941

Author : Hejnowicz, Z.

Inst : Not given

Title : Growth and Differentiation in the Root of Phleum Pratense.
I. Distribution of Longitudinal Growth in the Root.

Orig Pub : Acta Soc. bot. Polon., 1956, 25, No. 3, 459-478

Abstract : Growth of the root of timothy grass was studied by means of observation of the displacement of various dots on the surface of the root placed under the microscope in a chamber in which the nutritional solution was changing and aeration was kept steady. The rapidity of growth gradually increased, reached the maximum for a distance of $\sim 700\mu$ from the tip (with the general length of that zone $\sim 1500\mu$) and gradually increased over the extent of the significant part of the root. The results obtained do not agree with the assertion of Bloomfield (Amer. J. Bot., 1942, 29, 533-543), nor with

Card 1/2

USSR / Plant Physiology. Growth and Development

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Abs Jour : Ref Zhur - Biol., No 8, 1958, No 38941

Abstract : that of Goodwin and Stepko (ibid., 1945, 32, 36-43) with reference to the sudden decrease in the rapidity of growth at the end of the zone of growth.

Card 2/2

HEJNOWICZ, Zygmunt (Wroclaw)

So-called osmotic paradox in plant cells. Wszechswiat no.12:310-312 D '62.

HEJNOWICZ, Z.

Intrusive growth, transverse and pseudotransverse divisions in fusiform initials of wounded cambium of *Larix europaea*. Acta soc botan Pol 32 no.3:493-503 '63.

1. Katedra Anatomii i Cytologii Roslin, Uniwersytet, Wrocław.

HEJNOWICZ, Z.

Intrusive growth in the establishment of the cambial union in the *Larix* after transverse incision. Acta soc botan Pol 32 no.4:625-630'63.

1. Katedra Anatomii i Cytologii Roslin, Uniwersytet, Wrocław.

ROSAK, Z.; HEJNY, H.

Equipment for green malt conveying. Kvasny prum '9 no.7:176-
177 JI '63.

1. Obchodni sladovny, n.p., Prostějov.

CZECH

Pyridine derivatives of pharmacological interest. II. New β -picolyl-derivatives possessing peripheral vasodilator activity. Zdeněk J. Velděcký, Václav Trška, J. Holý, and V. Vysatý (Výzkumný ústav farm. biochem., Prague, Czech.). *Chem. Listy* 48, 435-41 (1954); *cf. C.A.* 49, 1034f. — β -Picolymercaptan (0.02 mole), b_p 115-23°, n_D^{20} 1.5730, in 5 ml. EtOH was poured into a 0.03 mole Na la 10 ml. EtOH, the mixt. treated dropwise with 0.032 mole alkyl halide, refluxed 3 hrs., the EtOH distd. off, the residue dild. with 30 ml. C_6H_6 , filtered, and the filtrate distd. Alkyls, yields in %, b_p , n_D^{20} , and $m.p.$ of the picrates (or dipicrolonates) are given. Picrates: Me, 62, 118, 1.5030, 134; Et, 62, 128, 1.5529, 95; Pr, 73, 138, 1.5010, 130; *iso*-Pr, 68, 127, 92; Bu, 69, 142, 1.4998, 82; *iso*-Bu, 64, 138, 1.4991, 140; 1.4977, hexyl, 72, 148, 1.4681, 83; cyclohexyl, 68, 145, 1.4695, 154; PA_2CH_3 , 92, 175, 1.5639, 119. Picrolonates: Me, NCH_3 , 71, 142, 1.5413, 100; Et, NCH_2CH_3 , 74, 153, 1.5351, 103; Me, $NCHMeCH_3$, 76, 155, 1.5297, 101; Et, $NCHMeCH_3$, 72, 168, 1.5032, 169. The picrates and picrolonates were crystd. from EtOH-Me₂CO. 2-Hydroxyethyl nicotinate (29 g.) treated in 100 ml. $CHCl_3$ with 36 ml. $SOCl_2$ in 50 ml. $CHCl_3$ gave HCl salt of 2-chlorethyl nicotinate, $m.$ 103° (from Me₂CO), which gave by alkalization with Na_2CO_3 and extn. with C_6H_6 25.8 g. (80%) 2-chlorethyl nicotinate (I), b_p 128-30°, $m.$ 29°, n_D^{20} 1.5302. I (9.30 g.) dissolved in 70 ml. C_6H_6 was added to a soln. prepd. by refluxing 6 hrs. 5.5 g. 3-pyridylcarbinol with 1.16 Na dust in 360 ml. C_6H_6 , the mixt. was refluxed 9 hrs., the NaCl filtered off, and the filtrate distd. to give 5.5 g. (50%) 2-(β -picolyloxy)ethyl nicotinate, b_p 151-3°, b_d 155°, n_D^{20} 1.4991; dipicrolonate, $m.$ 181°. All compds. were tested for their peripheral vasodilating, and some for their antihistaminic and spasmolytic activities. M. Hudlický

HEJNY, J.

KURTI, V. and HEJNY, J. "Relation between ascorbic and para-aminosalicylic acids." p. 251
(Casopis Lekaru Ceskych. Vol. 93, no. 9, Feb. 1954. Praha)

SO: Monthly List of East European Accessions, Vol. 3, no. 6, Library of Cong., ~~June~~, 1954
Uncl.

HEJNY, J.

Isolation and differentiation of Mycobacterium bovis. Cesk. epidem.
11 no.6:345-352 N '62.

1. Liecebna pre tuberkulozu, Vysne Hagy. :
(MYCOBACTERI M BOVIS)

HEJNY, J.

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CZECHOSLOVAKIA

JANCIK, E; HEJNY, J; KUBALA, E; LANGEROVA, M; SULA, L;
TOMAN, K.

Prague, Rozhledy v tuberkulose, No 4, 1963, pp 217-218

"The Present State and Perspectives of Microbiological
Diagnosis."

HEJNY, J.

CZECHOSLOVAKIA

HEJNY, J; MELICHER, J.

Sanatorium for Tuberculosis (Liecebna pre tuber-
kulozu), Vysne Hagy (for all)

Prague, Rozhledy v tuberkuloze, No 4, 1963, pp
237-242

"The Discovery of Mycobacterium Bovis in Patients
Treated at the Vysne Hagy Snatorium in 1960-
1961."

ZAHRADNICKY, J.; VYMOLA F.; HEJZLAR, M.; POTUZNÍK, V.; KUBALA, E.;
HEJNY, J.

Current status of the sensitivity of some pathogenic agents in
Czechoslovakia. Cas. lek. česk. 104 no.23:609-614 11 Je'65.

1. Ústav pro mikrobiologii a epidemiologii lékařské fakulty
Karlovy University v Plzni; Ústav epidemiologie a mikrobiologie
v Praze; Vojenský ústav hygieny, epidemiologie a mikrobiologie
v Praze; Krajská hygienicko-epidemiologická stanice v Českých
Budějovicích; Léčebna tuberkulózy v Janově u Mirosova; a Léčebna
tuberkulózy ve Vysných Hagách.

CZECHOSLOVAKIA

~~HEJNA~~

HEJNA, A; HEJNY, J.

Hospital for Tuberculosis (Liecebna pre tuberkulozu),
Vysne Hagy (for both)

Prague, Rozhledy v tuberkulose, No 10, 1963, pp 682-686

"The Presence of Myco Bovis in Patients Treated in Vysne
Hagy in 1960-1961. Part II. Clinical and Epidem io-
logical ~~Invest~~ Investigation."

~~GEJNY, Ladislav~~ HEJNY, Ladislav; TEGNIK, Vladimir [Tehnik, Vladimir],
inzhener; VOL'F, Iozef [Wolf, Josef], inzhener.

Technical progress in track maintenance on Czechoslovak railroads.
Zhel. dor. transp. 39 no.5:26-32 My '57. (MLRA 10:6)

1. Nachal'nik Tsentral'nogo upravleniya putevogo khozyaystva i
zdaniy (for Geyny). 2. Glavnyy inzhener upravleniya putevogo
khozyaystva i zdaniy (for Teginik). 3. Starshiy revizor upravleniya
putevogo khozyaystva i zdaniy (for Vol'f).
(Czechoslovakia--Railroads--Track)

HEJNY, Ladislav

How to organize the work of railroad track services.

Zes kop tech 12 no. 3: 65-66 '64.

HEJNY, Ladislav

Renewal of the rail track between the ~~Usti nad~~ Orlici and Dlouhva
Trevora stations. Zel dop tech 12 no.6:152-153 '64.

VEJSADA, Frantisek (Ceske Budejovice); LAMPIL, Olinier (Olomouc); KORNICEK,
Rudolf (Olomouc); KLATIL, Jiri (Plzen); STEDER, P. (Praag);
PROCHAZKA, Jiri (Usti nad Labem); HEJNY, M. (Zilina)

Reports on the activity of the Branches of the Association of
Czechoslovak Mathematicians and Physicists. Pokroky mat fyz nat
9 no.4:260-266 '64.

HEJNY, M. (Zilina, Hlavy, Blok 30)

Construction of the relative normal in a projective plane. Acta
r nat Univ Com 9 no.11:95-98 '64.

HEJNY, S.

"Conditions Under which Weed Rice (Oryza Fatua) Develops From Common Rice (Oryza Sativa)."
p. 107. (Chekhoslovatskaia Biologiia. Vol. 2, no. 2, Apr. 1953. Praha).

SO: Monthly List of ^{East European} ~~Russian~~ Accessions, Vol. 3, No. 6, Library of Congress, June 195⁴3, Uncl.

HEJNY, S.

"Study on the ecology of the Echinochloa species; Echinochloa crus galli (L)
P. Beauv. and Echinochloa coarctata (Stev.) Koss. In German.

p. 5 (Biologické Prace, Vol. 3, no. 5, 1957, Bratislava, Czechoslovakia.)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 6, June 1958.

ROSICKY, B.; HEJNY, S.

The degree of cultivation of a region and the epidemiology of
natural foci of infection. J. Hyg. Epidem., Praha 3 no.3:249-257
1959

(COMMUNICABLES DISEASES, epidemiol)

HEJNY, S., dr.; NEUHAUSL, R.

Biological basis for the protection and development of a healthy
area. Vestnik CSAV 71 no.4:435 '62.

CZECHOSLOVAKIA

HEJNY, S., NECHADSKÝ, R., Potentiok Institute of the Czechoslovak Academy of Sciences (Potentiok ústav Československé akademie věd), Praha, near Prague.

"The Perspectives of the Biological Foundations of the Protection and Development of a Healthy Countryside."

Bratislava, Biologia, Vol. 18, No. 3, 63, pp 169 - 183.

Abstract: The authors discuss the importance of the vegetation to the nature of living conditions of men and to their culture. They consider the importance of hydrography, re-arrangements, agricultural products, and the providing of spaces for recreation. They end the article by discussing architectural concepts for modern towns and villages.
1 English, 8 Czech, 25 German, 3 Russian references.

1/1

HEJSEK, J.

"APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R000617930004-1

"Preparing a Technical-Industrial Finance Plan for Supplying a Factory with Raw Materials and Equipment." p. 577,
(HUTNIKE LISTY, Vol. 9, No. 10, Oct. 1954, Brno, Czechoslovakia)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4
No. 5, May 1955, Uncl.

HEJSEK, J.

Experiences of the Kuznets foundry in saving fire-resistant materials. p. 283.

HUTNIK. Vol. 6, no. 9, Sept. 1956

Praha, Czechoslovakia

SOURCE: East European List (EEAL) Library of
Congress, Vol. 6, No. 1, January 1957